

Amendments to the Drawings:

The attached Replacement Drawing Sheet of drawing includes changes to Fig. 1. Fig. 1 has been amended such that reference numeral “201” and “101” have been changed to –101— and –201--, respectively.

REMARKS

Claims 1 - 13 are pending in the present application. By this Amendment, claims 1, 2 and 9 have each been amended. No new matter has been added. It is respectfully submitted that this Amendment is fully responsive to the Office Action dated June 3, 2005.

Allowable Subject Matter:

Applicants gratefully acknowledges the indication in item 7 of the Office Action that claim 2-7 and 9 would be allowable, if amended, to overcome the rejections under 35 USC 112, second paragraph, and to include all of the limitations of the base claim and any intervening claims.

However, for at least the reasons discussed below, it is respectfully submitted that all of claims 1-13 are allowable.

Drawings:

The drawings stand objected to on page 2 of the Action, since while the specification on page 10, line 3 recites reference numeral 202 for the mobile unit, in Fig. 1 the mobile unit is depicted by reference numeral 201.

However, it is submitted that Fig. 1 has been amended such that reference numeral "201" and "101" have been changed to -101--and -201--, respectively. In addition, page 9 of the present specification has also been amended such that reference numeral 201 now correctly

reads as 201 in accordance with Fig. 1. Accordingly, withdrawal of this objection is respectfully requested.

Title:

The title of the invention stand objected to in item 2 of the Action as being not descriptive. However, the title has been amended in the manner suggested by the Examiner to read as, "Adjusting The Throughput In A Wireless System." Accordingly, withdrawal of this objection is respectfully requested.

35 U.S.C. §112, Second Paragraph Rejection:

Claims 1-13 stand rejected under 35 U.S.C. §112, second paragraph, for failing to particularly point out and distinctly claim the subject matter which the applicant regards as the invention. This rejection is respectfully traversed. Claims 1, 2 and 9 have been amended to overcome this rejection. Accordingly, withdrawal of this rejection is respectfully requested.

35 U.S.C. §103 Rejection:

Claims 1, 8, and 10-13 stand rejected under 35 USC 103(a) as being unpatentable over Pankaj (U.S. Patent No. 6,393,012) in view of Jalai et al. "Data Throughput of CDMA-HDR a High Efficiency-High Data Rate Personal Communication Wireless System."

This rejection is respectfully traversed.

With regard to the primary reference of Pankaj, the Examiner acknowledges that Pankaj “may be silent or deficient to the further limitation of the specific formula (1).”¹ However, the Examiner asserts that, “[i]n particular, *Pankaj* teaches a similar formula at e.g., column 15, line 65”² and “*Jalai* teaches the further recited limitation above at e.g., top right column on page 3 with respect to Update Average Rate.”³

However, according to Pankaj:

In a particular embodiment using a “Modified Grade of Service (GOS)” algorithm, K is a constant that does not depend on the number of remote stations in the system. A filtered average throughput is maintained for each user and associated queue according to the following equation:

$$\text{Average_Throughput} = \{(1/TC) * \text{Old_Average_Throughput}\} + 1/TC * \text{Rate} \quad (1)$$

where Average_Throughput is the average throughput for each queue used in calculating the Desirability Metric Value of the queue, TC is a time constant, Old Average Throughput is the previous value of Average_Throughput, and Rate is the bit rate used to transmit from the queue in each time slot. The Average_Throughput is updated for each queue for every transmission time slot.⁴

Further according to Jalai, “2. Update Average Rate: For each user I $R_i(t+1) = (1-1/t_c) R_i(t) + 1/t_c * \text{Current_Transmission_Rate_of_User } i$.”⁵

However, Section 2143 of the MPEP has specifically stated that:

“To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference must teach or suggest all the claimed limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be

¹ Please see, line 16, page 4, of the Action.

² Please see, line 17, page 4 of the Action.

³ Please see, lines 18-19, page 4 of the Action.

⁴ Please see, col. 15, line 58 – col. 16, line 5 of Pankaj.

⁵ Please see, lines 1-4, right col. of page 3 of Jalai.

found in the prior art, and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 466, 20 USPQ2d 1438 (Fed. Cir. 1991)."

Therefore, it is both a court position and a Patent Office position that to establish a *prima facie* case of obviousness, 1) there **must be** some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings; 2) there **must be** a reasonable expectation of success; and 3) the teaching or suggestion to make the claimed combination and the reasonable expectation of success **must both be** found in the prior art, and not based on applicant's disclosure.

As such, it is respectfully submitted, that the Examiner has failed to establish a *prima facie* case of obviousness since the Examiner has failed to establish how one of ordinary skill in the art would modify the Average_Throughput equation disclosed by Pankaj with the Update Average Rate disclosed by Jalai to realize with a reasonable expectation of success the specific features of equation 1 as set forth in claim 1.


Moreover, the Examiner has failed to establish any type of motivation for one of ordinary skill in the art to perform such a modification. In other words, the Examiner is using impermissible hindsight, the applicants' own disclosure, as the only apparent motivation to combine the teachings of Pankaj and Jalai in the manner suggested by the Examiner.

Response under 37 C.F.R. §1.111
Attorney Docket No. 011505
Serial No. 09/988,732

In view of the aforementioned amendments and accompanying remarks, Applicants submit that the claims, as herein amended, are in condition for allowance. Applicants request such action at an early date.

If the Examiner believes that this application is not now in condition for allowance, the Examiner is requested to contact Applicants' undersigned attorney to arrange for an interview to expedite the disposition of this case.

If this paper is not timely filed, Applicants respectfully petition for an appropriate extension of time. The fees for such an extension or any other fees that may be due with respect to this paper may be charged to Deposit Account No. 50-2866.

Respectfully submitted,
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TEB/jl
Attachment: Replacement Drawing Sheet (Fig. 1)

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